

DOD INSECT REPELLENT SYSTEM

FACT SHEET 18-009-0714

What is the DOD Insect Repellent System?

The DOD Insect Repellent System is a proven method to reduce annoyance, pain and disease associated with insects. It incorporates permethrin repellent on the uniform, DEET repellent on exposed skin, a properly worn uniform, sleeping under bed nets, and taking anti-malarial medication. It is the safest way to prevent the attack on Soldiers by insects and other arthropods which can transmit diseases such as malaria, dengue, Lyme and leishmaniasis.

How do I know if my uniform is treated with permethrin repellent?

Army Combat Uniforms (ACUs) that are factorytreated with permethrin (ACU Permethrin) are now available to all Soldiers. The ACU Permethrin will

have a sewn-in label on both the trouser and the blouse indicating the uniform has been factory-treated with permethrin (see Figure 2). If not factory-treated, apply permethrin to uniforms in the field before wearing using either the IDA Kit (NSN 6840-01-345-0237), which can last up to 50 washings, or aerosol can (NSN 6840-01-278-1336), which lasts 5-6 washings. Other aerosol products containing 0.05% permethrin and permethrin-impregnated garments are also commercially available for civilian use.

What is considered a "properly worn uniform"?

Worn properly, your uniform acts as a physical barrier against insects. Wear the sleeves rolled down. Close all openings in your clothing that might provide access to insects: tuck your pants into your boots and your undershirt into your pants. Wear your uniform loosely since mosquitoes can bite through fabric that is pulled tight against the skin.

What are the standard bed nets available to help protect Soldiers from mosquito bites while sleeping?

Treated bed nets provide a barrier between a sleeping soldier and pests (e.g. mosquitoes / ticks). Lightweight, Self-Supporting, Pop-Up Bed Nets factorytreated with permethrin are available in Coyote Brown (NSN 3740-01-518-7310) or OD Green (NSN 8415-01-516-4415). Untreated Mosquito Bed Nets (NSN 7210-00-266-9736) should be treated with permethrin aerosol and set-up by properly tucking in and kept off the ground.

When should I take anti-malarial medication as part of the DOD Insect Repellent System?

Soldiers deployed or stationed in malaria endemic areas will be prescribed antimalarial medication by their healthcare provider. Even if you feel well, you need to take all your anti-malarial medication. Missing a single day may put you at risk for contracting malaria.



Figure 1. Combined use of all elements of the DOD Insect Repellent System provides maximum and safe protection from disease-bearing and nuisance biting insects. Use of the DOD Insect Repellent System by deployed Soldiers is required by DOD policy.



PERIMETER INSECT GUARD Insect Repellent Apparel

PineBelt Processing, Inc. 1122 South Erwin Road Stonewall, MS 39363

EPA Rea. No. 82392-1 EPA Est. No. 82392-MS-001

- This garment has been treated with the insect repellent.
- Repels mosquitoes, ticks, ants, spiders, flies, chiggers,
- Do Not Dry Clean-Dry cleaning removes active ingredient.
- Repellency remains effective for 25 washes. Do not retreat garment/fabric with other permethrin
- insect products. For protection of exposed skin, use in conjunction with
- an insecticide registered for direct application to the skin. Wash treated garment separately from other garments.
- Only launder permethrin treated and untreated garments together under field or combat conditions

| W/W |
|--------|
| 0.52% |
| 99.48% |
| |

Storage and Disposal

Total

Do not contaminate water, food or feed by storage or disposal. Disposal: Discard in trash when clothing is worn out. Do not reuse clothing/fabric for purposes other than originally intended.

.100.00%

Retain this tag for future reference on proper handling of this garment. It is a violation of Federal Law to use this product in a matter inconsistent with its labeling. This tag must not be removed except by consumer.

Figure 2. Example of the garment label found inside the ACU Permethrin. Follow all label instructions for garment care.

What are the standard military insect repellent products available for use on exposed skin?

- Ultrathon[™] (NSN 6840-01-284-3982) 33% controlled-release DEET lotion; one application protects for 12 hours.
- Ultra 30 Insect Repellent Lotion (NSN 6840-01-584-8393) contains 30% Lipo DEET; one application protects for up to 12 hours.
- Cutter® pump spray (NSN 6840-01-584-8598) contains 23% DEET; one application protects for up to 8 hours.
- Sunsect combination sunscreen & repellent (6840-01-288-2188) contains 20% DEET and SPF 15 sun protection.
- Natrapel® pump spray (NSN 6840-01-619-4795) contains 20% picaridin; provides improved protection against Anopheles mosquitoes (carriers of malaria).
- Camouflage Face Paint (CFP) with 30% DEET (NSN 6840-01-493-7334). NOTE: Do not apply repellent to the eyes or lips, or to sensitive or damaged skin.



Standard military insect repellents for use on exposed skin come in a variety of formulations (left). All standard skin repellents contain the active ingredient DEET or picaridin and are registered by the USEPA. These products are safe to use and effective at repelling the mosquitoes and ticks that carry disease.

Can I use repellents if I'm pregnant?

Yes, especially if you will be exposed to disease-carrying insects. Although it is wise to exercise a cautious approach when pregnant (e.g., try to avoid situations where disease-carrying insects may be present, use repellent sparingly, and wash off and discontinue use when insect exposure has ceased), there is no convincing evidence that DEET or permethrin, when used in accordance with label directions, will have an adverse effect on the mother or fetus. Conversely, insect-borne diseases such as malaria can be very harmful to both mother and fetus. Therefore, the CDC recommends that pregnant women, who are traveling to any area where they may be exposed to insect-borne diseases, use the same protective measures as non-pregnant travelers. The CDC indicates that these measures include covering up with clothing, applying DEET (up to 50%) to exposed skin, using a bed net, and applying permethrin to both clothing and bed nets. Where the probability of vector-borne disease transmission is remote, pregnant and nursing Soldiers, and Soldiers trying to get pregnant, are authorized to wear untreated uniforms prior to and after the wear of an untreated maternity uniform. Soldiers must see their Health Care Provider to obtain a temporary medical profile exempting the wear of a factory or individually treated permethrin uniform in order to purchase and wear a non-permethrin treated uniform.

What are some of the threats Soldiers face by NOT implementing the DOD Insect Repellent System?

Many vector-borne risks exist for service members, both here in the U.S. and overseas. The risk of a mosquito- or tick-borne disease is present in nearly every US state. In 2012, a total of 5,674 cases of West Nile virus disease in people, including 286 deaths, were reported to CDC from 48 states (excluding Alaska and Hawaii). Tick transmitted diseases are a threat as well, with nearly 30,000 cases confirmed in the US in 2009, with most of the cases reported from states in the Northeast and upper Midwest. This represents a steady increase from the approximately 12,000 cases reported in 1995. In addition to Lyme disease, Soldiers in the U.S. can be exposed to other tick-borne bacterial diseases— human anaplasmosis, ehrlichiosis, rickettsiosis, babesiosis, and the viral disease Powassen encephalitis. Vaccines are not available against most of these diseases.

Where can I get more information on DOD Insect Repellent System?

The U.S. Army Public Health Command (USAPHC), Entomological Sciences Program website: http://phc.amedd.army.mil/topics/envirohealth/epm/Pages/DoDInsectRepellentSystem.aspx More information about the ACU Permethrin can be found at:

http://phc.amedd.army.mil/topics/envirohealth/epm/Pages/PermethrinFactory-

treatedArmyCombatUniforms(ACUPermethrin).aspx

AFPMB Technical Guide 36, "Personal Protective Measures Against Insects and Other Arthropods of Military Significance" http://www.afpmb.org/sites/default/files/pubs/techguides/tg36.pdf